

CURRICULUM STANDARD

Effective Term
Spring 2009
[2009*01]

Curriculum Program Title Computed Tomography & Magnetic Resonance Code D45200
Concentration Imaging Technology (Diploma)
(not applicable)

Curriculum Description

The Computed Tomography and Magnetic Resonance Imaging Technology curriculum prepares the individual to use specialized equipment to visualize cross-sectional anatomical structures and aid physicians in the demonstration of pathologies and disease processes. *Individuals entering this curriculum must be registered or registry-eligible radiologic technologist, radiation therapist, or nuclear medicine technologist.*

Course work prepares the technologist to provide patient care and perform studies utilizing imaging equipment, professional communication, and quality assurance in scheduled and emergency procedures through academic and clinical studies.

Graduates may be eligible to sit for the American Registry of Radiologic Technologist Advanced-Level testing in Computed Tomography and/or Magnetic Resonance Imaging examinations. They may find employment in facilities which perform these imaging procedures.

*Curriculum Requirements**

[for associate degree, diploma, and certificate programs in accordance with 23 NCAC 02E.0204 (3)]

- I. General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.
- II. Major Hours.** AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*
- III. Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

	AAS	Diploma	Certificate
Minimum General Education Hours	15	6	0
Minimum Major Hours	49	30	12
Other Required Hours	0-7	0-4	0-1
Total Semester Hours Credit (SHC)	64-76	36-48	12-18

**Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic use of computers.*

Major Hours

[ref. 23 NCAC 02E.0204 (3)]

- A. Core.** The subject/course core is comprised of subject areas and/or specific courses which are required for each curriculum program. A diploma program offered under an approved AAS program standard or a certificate which is the highest credential level awarded under an approved AAS program standard must include a minimum of 12 semester hours credit derived from the subject/course core of the AAS program.
- B. Concentration** (if applicable). A concentration of study must include a minimum of 12 semester hours credit from required subjects and/or courses. The majority of the course credit hours are unique to the concentration. The required subjects and/or courses that make up the concentration of study are in addition to the required subject/course core.
- C. Other Major Hours.** Other major hours must be selected from prefixes listed on the curriculum standard. A maximum of 9 semester hours of credit may be selected from any prefix listed, with the exception of prefixes listed in the core or concentration. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit.

Computed Tomography & Magnetic Resonance Imaging Technology (Diploma) D45200

	AAS	Diploma	Certificate
Minimum Major Hours Required	49 SHC	30 SHC	12 SHC
A. CORE Required Courses: CAT 210 CT Physics and Equipment 3 SHC CAT 211 CT Procedures 4 SHC MRI 210 MRI Physics and Equipment 3 SHC MRI 211 MRI Procedures 4 SHC Required Subject Areas: CAT Clinical Practicum. Select 11 SHC: CAT 223 CT Clinical Practicum 3 SHC CAT 224 CT Clinical Practicum 4 SHC CAT 225 CT Clinical Practicum 5 SHC CAT 226 CT Clinical Practicum 6 SHC CAT 227 CT Clinical Practicum 7 SHC CAT 228 CT Clinical Practicum 8 SHC CAT 231 CT Clinical Practicum 11 SHC MRI Clinical Practicum. Select 11 SHC: MRI 223 MRI Clinical Practicum 3 SHC MRI 224 MRI Clinical Practicum 4 SHC MRI 225 MRI Clinical Practicum 5 SHC MRI 226 MRI Clinical Practicum 6 SHC MRI 227 MRI Clinical Practicum 7 SHC MRI 228 MRI Clinical Practicum 8 SHC MRI 231 MRI Clinical Practicum 11 SHC		36 SHC	
B. CONCENTRATION (Not applicable)			

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Computed Tomography & Magnetic Resonance Imaging Technology (Diploma) D45200

C. OTHER MAJOR HOURS

To be selected from the following prefixes:

CAT, CIS, COE, CSC, HSC, and MRI

Foreign language courses (including ASL) that are not designated as approved other major hours may be included in all programs up to a maximum of 3 semester hours of credit.